Michigan Department of Environmental Quality

Fiscal Year 2015 205(j) Grant
Annual Report – October 1, 2016 to September 30, 2017
Federal Grant #: C600E727-15

This report summarizes the activities conducted by staff of the Surface Water Assessment Section, Water Resources Division, Department of Environmental Quality, under the 2015 205(j) Federal Grant # C600E727-15. The grant application and work plan were submitted to USEPA on July 24, 2014 and approved on September 15, 2014. The work plan identified several activities to be completed – water quality criteria development and two pass-through projects which are described below.

Water Quality Criteria:

DEQ staff completed the following activities in FY17:

- Updated aquatic life and/or human health values for thallium (7440-28-0), 1,1-dichloroethylene (75-35-4), 1,1,2-trichloroethane (79-00-5), naphthalene (91-20-3), 1,2-dichloroethane (107-06-2), carbon tetrachloride (56-23-5), and 1,1,1-trichloroethane (71-55-6).
- Assessed whether the proposed discharge from the Back 40 Mine would adversely impact sturgeon, mussels, and wild rice in the Menominee River. Worked on study design for conducting whole effluent toxicity tests on mussels with effluent from the proposed Back 40 Mine.
- Determined whether the use of the product Zequanox could adversely affect non-target organisms when applied according to label instructions. As part of our assessment, we estimated aquatic life values for the active ingredient of the product.
- Determined whether aquatic life could be impacted by two spills. The first spill required
 the determination of concentrations of penoxsulam (219714-96-2) that would not
 adversely impact aquatic plants, whereas, the second spill required the assessment of
 whether levels of manganese, aluminum, iron and vanadium in a creek could adversely
 impact aquatic life.

Pass Through Grants:

EPA approved the following pass-through projects described below:

• NPS Watershed Management Planning via the NPS Program's FY16 Request for Proposals (RFP). (Approximately \$181,600). The grant contract for the Bean Creek Watershed Management Plan project was signed by MDEQ on January 9, 2017. The grantee began assembling a steering committee and dedicated a portion of a field day event held during summer 2017 to introduce the project to local farmers and stakeholders. A consultant was hired by the grantee to assist with development of an EPA approvable nine-element watershed management plan. Portions of the draft watershed management plan are in early stages of development. DEQ staff provided GIS and other technical support to the grantee regarding agricultural inventory work to

be conducted throughout the project. The first iteration of this inventory was completed during summer 2017 and the second is planned for late fall/early winter 2017.

- Wetland Mitigation Bank Planning. (\$30,800). This project was awarded to the Monroe County Drain Commissioner. The grant contract was signed September 2, 2016 and the project ended August 31, 2017. This project included:
 - Development of a booklet on wetland mitigation banking best management practices for Drain Commissioners, including site selection criteria. It includes use of GIS to identify potential sites, and other recommendations for identifying suitable sites. This booklet also discusses how many types of projects requiring regional detention may be suitable for wetland mitigation banking projects, that creation of a wetland mitigation bank may be a viable alternative to traditional detention, and how to coordinate with the MDEQ. This booklet also addresses considerations of upfront costs of wetland mitigation banking, environmental benefits of wetland mitigation banking, and cost savings and revenue sources that may be derived from wetland mitigation banking.
 - Outreach to drain commissioners through presentations at several conferences and meetings, including the Michigan Association of County Drain Commissioners annual summer conference. As well as distribution of the informational booklet at those events.
- Aquatic Invasive Species (AIS) Decontamination Training Certification Program.
 (\$30,000) The contract was signed in January of 2016 and the final report and training module was submitted March of 2017. Under this grant, the Huron River Watershed Council developed a web-based AIS decontamination training module for professionals and volunteers working on aquatic ecosystems. The training module formatting is being adjusted and it will soon be available on the State of Michigan's invasive species website.

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Surface Water Assessment Section

Water Resources Division December 15, 2017